

T05D01 – Heat Change Notes

Take the following notes from the powerpoint:

What is the difference between temperature and thermal energy?

What is a calorie?

What is a joule?

What is Calorimetry?

What is the difference between the system and the surroundings?

What is the difference between endothermic and exothermic?

The formulas (equations) for heat change are? (one uses mc, the other, C)

Water is a very common substance used in calorimetry, what is the specific heat of water as a liquid?

Where:

q =

c =

C =

m =

ΔT =

Example: Follow the example in the powerpoint below: How much heat is given off when an 869 g iron bar cools from 94°C to 5°C ?
The specific heat of Fe is $0.444 \text{ J/g} \cdot ^{\circ}\text{C}$

What is enthalpy?

Draw an example of an endothermic and an exothermic process, include the equations and the value for ΔH :

Exothermic	Endothermic